Chain Reaction Contraption

Kit contains:

- contraption template
- cardboard base
- 2 marbles
- 2 skewer halves
- straw piece
- pipe insulation piece

You will need: scissors, tape, and coloring supplies (optional).

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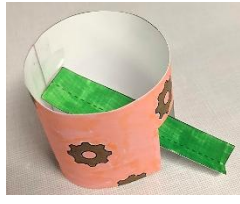
INSTRUCTIONS

Step 1. Color your contraption pieces, if desired. Then cut them out along the black lines.



Step 2. Tape your funnel tower into a cylinder. Crease the exit ramp along the dashed line. Tape one end to the red alignment line inside the tower. The other end will stick out the door.

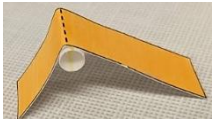
Step 3. Tape your funnel into the shape of a funnel. (I suspect you predicted this part.) Attach it to the tower.

Step 4. Crease your on-ramp along the dashed line. Slide it onto the funnel at an angle as shown. Tape in place.

Adapted from: rika.k8246.net/bi-dama-machin.html

Step 5. Test! Marble #1 starts at the on-ramp, travels around and around the funnel, and rolls out the exit ramp.

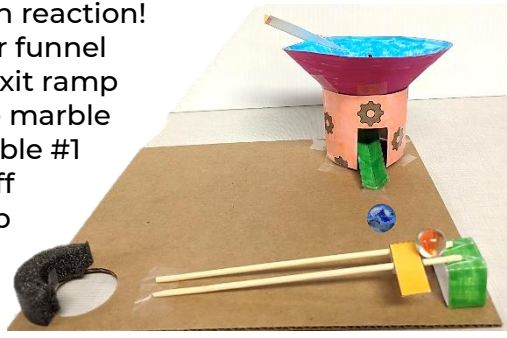
Step 6. Fold and tape your skewer holder into a trapezoid. Tape the skewers to the edge.



Step 7. Fold your marble stopper on the dashed line. Tape the straw into the crease so that it forms a right angle.

Step 8. Slide the marble stopper onto a skewer as shown, short end pointing down. Tape the structure onto the cardboard base, aimed at the hole. When the stopper flips up, marble #2 rolls down the skewer ramp and into the hole.

Step 9. Chain reaction! Position your funnel tower with exit ramp aimed at the marble stopper. Marble #1 should roll off the ramp, flip the stopper to release marble #2, and send it into the hole. When it works, tape the tower to the cardboard base. Attach the pipe insulation as a backstop to the hole.



CHAIN REACTIONS: A **chain reaction** is a sequence of events where one initial action triggers a series of other reactions, with each step causing the next. A truly epic chain reaction was created by the band OK Go for their music video "This Too Shall Pass":

https://youtu.be/qybUFnY7Y8w